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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/710,440      | 07/12/2004  | Ching-Jun Su         | WISP0044USA         | 4439             |

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| 27765   | 7590 | 02/07/2008 |
| NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION |      |            |
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| MERRIFIELD, VA 22116                            |      |            |

|          |  |
|----------|--|
| EXAMINER |  |
| XIAO, KE |  |

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
| 2629     |              |

|                   |               |
|-------------------|---------------|
| NOTIFICATION DATE | DELIVERY MODE |
| 02/07/2008        | ELECTRONIC    |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

winstonhsu.uspto@gmail.com  
Patent.admin.uspto.Rcv@naipo.com  
mis.ap.uspto@naipo.com.tw

|                              |                                      |                                  |  |
|------------------------------|--------------------------------------|----------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/710,440 | <b>Applicant(s)</b><br>SU ET AL. |  |
|                              | <b>Examiner</b><br>Ke Xiao           | <b>Art Unit</b><br>2629          |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Gould Bear (US 2004/0227731) in view of Feinstein (US 6,466,198).

Regarding **Claim 1**, Gould Bear teaches an electrical device capable of auto-adjusting display direction according to a tilt of a display (Gould Bear, Figs. 18A-18D) comprising:

- a housing (Gould Bear, Fig. 18A-18D element 1802);
- a display panel installed on the housing for displaying images (Gould Bear, Fig. 18A-18D display panel);
- a manual switch for generating a parameter for defining the tilt of the display panel (Gould Bear, Fig. 18A-18D);
- a direction control device for generating direction signals (Gould Bear, Fig. 15A, and 18A-18D directional buttons);

a microcontroller for adjusting the display direction of the display panel based on the parameter, and for adjusting the indicated direction corresponding to direction signals generated by the direction control device (Gould Bear, Pg. 3 paragraph [0073], Figs. 15A, 17 and 18A-18D, as the device is rotate the displayed image is also rotated and the directional button functions are remapped).

Gould Bear fails to teach a gravity sensor for generating a sensing parameter based on a tilt of the display as claimed. Feinstein teaches a gravity sensor for generating a sensing parameter based on a tilt of the display, which is then used to define the position of the displayed image (Feinstein, Figs. 2 and 5) wherein the gravity sensor comprises:

an x-axis gravity sensor for sensing tilt in the x-coordinate direction and producing a first tilt signal (Feinstein, Fig. 5 element 82);

a y-axis gravity sensor for sensing tilt in the y-coordingate direction and producing a second tilt signal (Feinstein, Fig. 5 element 84); and

a duty signal modulator for respectively transforming the first tilt signal and the second tilt signal into first square wave and a second square wave (Feinstein, Fig. 5 elements 82 and 84, Fig. 7C), wherein the duty cycles of the first and second square waves respectively vary according to a tilting amount of the electrical device in the x-coordinate direction and the y-coordinate direction, the first and second square waves together forming the sensing parameter (Feinstein, Fig. 5 element 100).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the gravity sensor to define the tilt of the display as taught by Feinstein in place of the generic switch of Gould Bear in order to allow for automatic sensing of orientation.

Regarding **Claim 2**, Gould Bear further teaches that the direction control device is a set of four direction buttons (Gould Bear, Fig. 17 Up Down Previous Next).

Regarding **Claim 3**, Gould Bear further teaches that the direction control device is set on the housing (Gould Bear, Figs. 15A and 18A-18D).

Regarding **Claim 4**, Gould Bear further teaches that the direction control device is a joystick connected to the housing of the electronic device (Gould Bear, Pg. 10 paragraph [0134]).

Regarding **Claim 5**, Gould Bear further teaches the electronic device being capable of displaying the images in four different directions (Gould Bear, Fig. 18A-18D).

Regarding **Claim 6**, Gould Bear in view of Feinstein further teaches that the microcontroller switches the display direction of the display panel when the tilt angle detected by the gravity sensor reaches a predetermined angle (Gould Bear, Pg. 3 paragraph [0073], Figs. 15A, 17 and 18A-18D, Feinstein Figs. 1, 5 and 7).

Regarding **Claim 7**, Gould Bear further teaches that the electrical device is a tablet PC (Gould Bear, Pg. 10 paragraph [0136]).

***Response to Arguments***

Applicant's arguments with respect to Claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ke Xiao whose telephone number is (571)272-7776. The examiner can normally be reached on Monday through Friday from 8:30AM to 5:00PM.

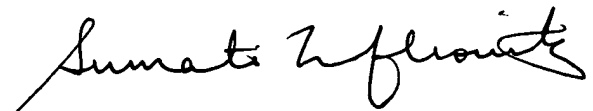
Application/Control Number:  
10/710,440  
Art Unit: 2629

Page 6

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

January 28, 2008 - kx -



**SUMATI LEFKOWITZ**  
**SUPERVISORY PATENT EXAMINER**